

## DOCUMENT RESUME

ED 408 706

EA 028 446

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TITLE School Principals' Understanding of Mutual Responsiveness in Effective Leadership.  
PUB DATE Mar 97  
NOTE 26p.; Paper presented at the Annual Meeting of the American Educational Research Association (Chicago, IL, March 24-28, 1997).  
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)  
EDRS PRICE MF01/PC02 Plus Postage.  
DESCRIPTORS \*Administrator Attitudes; \*Administrator Effectiveness; Administrator Role; High Schools; Interprofessional Relationship; \*Leadership; \*Leadership Styles; \*Principals; Public Schools; Women Administrators

## ABSTRACT

Research has demonstrated that corporations succeed or fail on the basis of how well they are led. Although the importance of leadership in organizational decision making has been recognized and studied extensively, numerous studies have also demonstrated the central role that the principal plays in shaping the school culture which, in turn, is a critical factor in determining the success of the school district. Additionally, an essential component of effective leadership is the cultivation of followers. This paper presents findings of a study that sought to determine whether public high school principals in Ohio understood the role and importance of followership in school leadership, in particular, the role that they played as followers. A survey of a random sample of 111 Ohio public secondary school principals elicited 84 responses, a 76 percent response rate. The survey instrument was the Principal Sentiment Inventory (PSI). The data suggest that the principals were aware of and saw followership as essential to carrying out their role as middle managers. The principals exemplified three types of followership--exemplary, pragmatic, or conformist. Female high school principals reported a higher level of active engagement than male principals. Two figures and four tables are included. (Contains 28 references.) (LMI)

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Running Head: SCHOOL PRINCIPALS' UNDERSTANDING OF MUTUAL  
RESPONSIVENESS IN EFFECTIVE LEADERSHIP

School Principals' Understanding of Mutual Responsiveness in Effective Leadership

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A Paper Presented at the Annual Meeting of the  
American Educational Research Association

Chicago, Illinois

March 24-28, 1997

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### Abstract

Research has demonstrated that corporations succeed or fail, compete or collapse, on the basis of how well they are led. While the importance of leadership in organizational decision making has been recognized and studied extensively, numerous studies have also demonstrated the centrality of the role of the principal in shaping the school culture which, in turn, is a critical factor in determining the success of the school district. And while leadership is important, an essential component of effective leadership is the cultivation of followers. Many practitioners and researchers have lost sight of the people these leaders will lead. The purpose of this study was to determine if public high school principals in the state of Ohio understand the role and importance of followership in influencing school leadership. Investigation of the data revealed that these high school principals were aware of and saw as essential the importance of followership in their role as middle managers. The principals in this study were identified as three types of followers: Exemplary, Pragmatist, or Conformist. Female high school principals reported a higher level of active engagement in this role than male high school principals in this study.

## School Principals' Understanding of Mutual Responsiveness in Effective Leadership

### Background

William Cohen, in his new book *The Art of The Leader*, says no leader can succeed without the help of others. In fact he recognizes that leadership exists throughout any organization, regardless of any individual title or position. Certainly the importance of effective leadership in any organization has been recognized and widely studied (Burns, 1978; Covey, 1993; Graham, 1995; Kouzes & Posner, 1995; Senge, 1994). Leadership has been the subject of much interest and discussion in the latest round of school reform debate as well. Many argue that strong leadership is essential for schools to accomplish the restructuring and improvement that is proclaimed necessary for the continuation of our educational system. Numerous educational studies have indicated the important role the building principal plays in determining the success of a school (Deal and Peterson, 1990; Leithwood, 1994; Ogawa & Bossert, 1995; Sergiovanni, 1992), but few studies have examined the relationship of the principal with his/her superintendent and the role the school principal plays within the district. Many principals are involved in initiatives for site based management, strategic planning or total quality management, but they may not understand the critical role that that they play as followers in a leader's ability to direct an organization successfully. The idea of the "John Wayne" leader, one who can take charge and direct the effort on his own, remains a clear image in beliefs about how principals can accomplish the needed changes in education. Many principals face conflict in their roles as both leader and follower in the middle management position which they fill within the school district. Yet principals are in an ideal position, as both leaders and followers, to demonstrate the qualities of good leadership and good followership. Whether the principal understands the concept of leadership/followership and how s/he perceives the relationship with central office

personnel as well as with faculty and students are important components in the ability to lead a school organization effectively. This study set out to determine if principals understand followership and exhibit it in their belief systems.

The importance of followership in business and organizational development has been recognized by various writers (Graham, 1995; Burns, 1978; Kelley, 1991; Hollander and Offerman, 1992; Lee, 1991; Lundin and Lancaster, 1990). Increasingly leaders have recognized that workers can provide valuable and important input into the successful management of any organization. As workers become "empowered" they assume new leadership roles and responsibilities. This empowerment is best demonstrated in schools which are moving toward site based management in which teachers and principals share governance. Sergiovanni (1992) has pointed out that as teachers become more professional, less leadership is required of the principal. The more professional administrators and teachers become, the more a less directive form of leadership is needed by administrators as everyone in the school assumes more responsibility for change and improvement. Leaders in schools and businesses are shifting their vision of workers as no longer just subordinates but also as empowered followers who are part of a community which works together toward a common goal (Senge, 1994). Followers have responsibilities to assist the leader by challenging decisions and participating as leaders when they are needed. Principals are in a unique role in that they can model the followership role as both leaders in their school buildings and employees of the school district. In addition, since principals are often "aspiring" to be superintendents, they can demonstrate their leadership ability by proving themselves to be good followers. Good principals understand the importance of proving themselves in a follower's role so that they can be seen as candidates for succession to the next level.

The concept of followership is not a new one. As early as the 1920s, Mary Parker Follett (Graham, 1995) suggested that leaders need to teach workers how to be

followers, to engage them in self-management and an emotional commitment to the organization. She believed that managers influence workers who influence managers; this interaction also changes the environment because of the interaction itself. Experience on every level alters the terms of relationships between workers and managers as well as the relationship itself. The importance of "power with" workers rather than "power over" workers incorporated this idea of "followership," i.e., workers would become engaged and involved in working for the success of the organization if they were empowered to ownership and given responsibility. The value of her ideas were not recognized at the time; the hierarchical type of leadership, espoused by Frederick Taylor, which supported a structured and scientific form of management has prevailed for the past fifty years.

The terms leadership and followership can be misleading. There are many definitions of leadership. Leadership is sometimes confused with authority or power, yet neither is automatically acquired or bestowed (French & Raven, 1960). Leadership is often assumed to emanate from the head of an organization such as a school. However, true leadership is not vested in a position or person. Various authors agree on a definition of leadership as the ability to mobilize resources in order to accomplish goals (Owens 1995; Heifetz, 1994; Kouzes & Posner, 1995). Leadership is confused with authority or power because the term leader is often used interchangeably with manager, president, boss, or CEO. However, these positions of power are not necessarily positions of leadership. Leadership may be accomplished by various people in organizations who may also have authority, power, and influence. It is important to note that leadership occurs when two or more people interact; it is a group function involving relationships between people (Owens, 1995). Therefore, leaders need to attract followers, those who will help with the accomplishment of the goals.

Follower is a term that is frequently confused with subordinate or worker. However, follower, according to Chaleff (1995), Kelley (1988) and Lee (1991), is not

synonymous with subordinate. Followers are characterized as stewards (Chaleff, 1995) or partners (Kelley, 1992). For the purpose of this study, the term "follower" will reflect the meaning of Kelley and Chaleff: someone sharing a common purpose with the leader, believing in what the organization is trying to accomplish, and wanting both the leader and the organization to succeed. Nearly all individuals recognize that any organization requires the talents and skills of all its workers; people perform different tasks but all contribute to overall success. Leaders and followers acknowledge their mutual need and responsibility, but not all of them recognize that leaders and followers are locked in a symbiotic relationship that is required for the organization to become successful in attaining its goals. Followers also play a powerful role in determining the success or failure of any leader (Kelley, 1988) for they are able to subvert leadership or ensure the success of the leader, depending upon their use of influence, power, and recognition. Kelley (1988) believes that followers are more important than leaders. Kouzes and Posner (1995) go further. They believe the best leaders are also the best followers. They suggest that the "John Wayne" type of leader is really a myth, and a true leader pays attention to the desires and needs of his followers. Followership and leadership are roles, not position or people, which many members of an organization may fill at different times (Kelley, 1991).

Not all subordinates are followers. Kelley identifies six skills which he believes are characteristic of followership: self management, commitment, competence, credibility, contributions, and courage (Kelley, 1991). Lundin and Lancaster (1990) identify four characteristics which they believe make followers effective: integrity, owning the territory, versatility, and self-employment. Chaleff (1995) described four types of behavior which he believes assist followers in being effective: they are collaborative and cooperative, are able to so integrate their ego needs sufficiently into the organizational goals that they do not need to compete with the leader, can serve to guide leaders around pitfalls, and serve as support for the needs of both leaders and



followers. Followers feel a sense of self-efficacy, a type of empowerment (or enabling, as Kelley prefers to call it) which allows them to assume leadership for many of the organization's goals. Chaleff (1995) reminds us that it takes courage to be a true follower.

It seems apparent that followers display many of the qualities desired in exemplary leaders. Kelley(1992) identified two dimensions which undergird the concept of followership: the first of these is the ability to think independently and critically. Followers have personal integrity. They have a strong personal ethos which guides their action; they do what they believe to be right, despite prevailing attitudes and beliefs. Lee (1991) cites Warren Bennis' comment that the single most important characteristic of a follower is a willingness to tell the truth as s/he sees it. Followership, like leadership, requires courage. The second dimensions which Kelley identifies is active engagement with and for the organization. The ability to act, often without direction from a leader or sometimes in spite of a leader's opinion, is an important quality which true followers possess. Followers also display commitment to the organization. Followers feel a sense of ownership for mutually agreed upon goals. Followers are collaborative in decision-making and implementation of plans to achieve goals. Followership requires competence and the responsibility for developing new skills which are important to the organization's success. Finally, followership demands self-management. Followers are enterprising, creative, and enthusiastic and like "leaders" they take initiative and possess a certain amount of "get-up-and-go." Exemplary followership results in a redistribution of power within the organization which can be unsettling and challenging for many administrators.

Kelley identified five types of followers, based on their levels of active engagement and independent thinking (See Figure 1). Those who score high on both dimensions are called Exemplary Followers. Exemplary Followers are focused and committed to the success of the organization and exercise a courageous conscience which

guides their activities and relationships within the organization. Pragmatist Followers “hug the middle of the road.” They perform their required tasks well, but seldom venture beyond them. They are particularly sensitive to the shifting winds of organizational politics. Conformist Followers are high on the active engagement scale but low on independent thinking. According to Kelley (1992), “Conformists are all too eager to take orders, to defer to the leader’s authority, and to yield to the leader’s views or judgments. They assume that the leader’s position entitles him or her to obedience and accommodation for the subordinate” (p. 108). Alienated Followers score high on the independent thinking scale but are not actively engaged in the work of the organization. They may see problems but shirk responsibility for involving themselves in solutions to these concerns. They are thoughtful but are also disengaged, unwilling to provide support for the leader or active involvement in the goals of the organization. Last but not least are Passive Followers, those who are neither actively engaged nor thinking independently. These principals have essentially quit. They hope to quietly maintain their positions, by going along and hoping no one will notice their indifference or disengagement.

When principals do not understand the important role that they play as followers in the success of the entire school district, their leadership potential may be undermined or weakened considerably. Yet few administrator preparation courses include a discussion of followership and the importance of the superintendent/principal relationship to organizational success. Many school administrators have been trained in a leadership process which still proposes an hierarchical style of decision making. They assume that the superintendent is the CEO and his/her decisions are not to be questioned. Their political survival may depend on acquiescing to the superintendent’s decision, but if schools are to be successful in accomplishing the restructuring and improvement goals that are expected of them, administrators will have to replace the hierarchical image of superintendent/ principal/teacher with a new concept:

partnership (Kelley, 1991). Principals need to become aware of their role in fostering collegial, empowering relationships with all others in their school community. How they understand that role and exhibit it in their belief systems is the purpose of this study.

## Methodology

### Subjects

The target population consisted of a random sample of 111 public school secondary principals in the state of Ohio. Approximately 76% of the sample responded to the first mailing, resulting in a total sample size of 84 out of 111. Respondents were asked to answer several queries concerning the following: current administrative position, years in current position, total years as an administrator, building level, type of school (i.e., rural, suburban or urban), gender, the highest degree obtained, age, and total number of years in education. Responses to the demographic questions are listed in Table 1.

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Insert Table 1 about here.

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### Instrumentation:

The *Principal Sentiment Inventory (PSI)* is based on the Followership Questionnaire developed by Kelley (1992) to assist people in understanding the key aspects of followership. Questions were revised in language and item order with the intention of addressing the work of building administrators. The *PSI* consists of questions using a Likert scale response to assess the extent to which specific actions and characteristics on the part of school principals reflect their understanding of followership. Respondents were asked to rank statements associated with a particular action or belief concerning the relationship between the principal and the

superintendent. Survey questions were based on a five-point Likert scale. The initial screening of the survey instrument was conducted with 50 building administrators in the presence of one of the researchers. This session was held to insure survey clarity as well as to determine the length of time necessary for respondents to complete the questionnaire. Internal reliability was assessed using the data gathered with these pilot surveys which resulted in further revisions of survey question wording and placement. The final survey was two pages in length with an area for demographic questions and general instructions. It contained 20 items reflective of the significant concepts, characteristics, and dimensions of followership (Kelley, 1992). The time it took participants to complete the survey ranged between 5 and 8 minutes.

#### Data Analyses

All analyses were conducted using the Statistical Package for the Social Sciences (SPSS, version 6.1). Four types of analyses were used on the completed surveys. First, descriptive statistics were computed for purposes of summarizing the demographic characteristics of the sample and the ratings for each item appearing on the survey (means and standard deviations). Second, a scatterplot of the two subscales of followership (i.e., active engagement x independent thinking) as outlined by Kelley (1992) was examined. Third, Cronbach coefficient alphas (Crocker & Algina, 1986) were conducted in order to ascertain the degree of internal consistency exhibited by the instrument. Examination of the reliability analysis indicated that the instrument exhibited moderate to strong internal consistency. The overall alpha coefficient ( $\alpha$ ) was equal to .80 and the standardized item alpha coefficient ( $\alpha$ ) was .83. Finally, a series of one-way and two-way analyses of variance were conducted to determine whether significant differences existed on the followership subscales when comparing demographic data. All analyses of variance were conducted at the  $\alpha = .05$  level of significance.

## Procedures

Using a table of random numbers, 111 public secondary school principals were randomly selected from a list of building administrators in the state of Ohio using the Ohio Educational Directory (1995-1996) published by the Ohio Department of Education. A copy of the *Principal Sentiment Inventory (PSI)* was sent to each principal along with a cover letter explaining the nature of the study, a request for participation, a request for demographic information, and a self-addressed stamped envelope. Eighty-four (75.6%) of the sample responded to the first mailing; therefore no subsequent mailings were made.

Along with demographic information, means and standard deviations were calculated for each of the followership subscales by summing the ratings of the individual items on each scale. In order to examine individual responses and their ratings on the followership scales (Kelley, 1992), a scatterplot of the subscale scores (active engagement x independent thinking) was plotted and reviewed by the authors.

The central analysis of this study consisted of one-way and two-way analyses of variance to examine the subscale scores with respect to differences based on demographic reporting. For each subscale, group comparisons were made on the following variables: years in current position, years as an administrator, school location, gender, highest academic degree, age and total years in education.

## Results

Two subscale scores were computed for each respondent of the survey. The mean and standard deviation of the two subscales are shown in Table 2.

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Insert Table 2 about here.

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Of particular interest to the authors was the participants' assessment of their own followership style. Using the Followership Style Grid in Kelley (1992, p.97) a scatterplot of the individual responses was generated (see Figure 1).

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Insert Figure 1 about here.

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Responses indicate that the principals in this study fell into one of three styles of followership: Exemplary Followers, Pragmatist Followers, or Conformist Followers. None were Alienated or Passive Followers. All reported high levels of active engagement in their work within the school district. Varying levels of independent thinking were reported.

Through a series of analyses of variance the researchers wanted to determine whether significant differences existed on the followership subscales (i.e., independent thinking and active engagement) based on respondent's demographic data. The analysis of variance comparisons on the independent thinking subscale resulted in no significant differences between any of the demographic comparisons (see Table 3).

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Insert Table 3 about here.

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While a majority of the comparisons on the active engagement subscale were not statistically significant, the comparison of gender did result in a significant difference (see Table 4). Female respondents ( $M = 44.86$ ,  $SD = 3.25$ ) had a significantly higher mean score on the active engagement subscale than did the male respondents ( $M = 42.21$ ,  $SD = 3.37$ ) to this survey [ $F(1,78) = 5.89$ ,  $p < .05$ .]

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Insert Table 4 about here.

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Based on the significant findings with respect to gender on the active engagement subscale, several two-way analyses of variance were conducted as follow up. The authors believed that years in an individual's current position may have an impact on the level of administrator's active engagement regardless of gender. Specifically, two two-way analyses of variance tests were conducted in order to investigate the possible existence of interaction between (1.) gender and years of administrative experience and (2.) gender and years in current position. Examination of these results revealed no significant interactive effects between these variables.

As further follow up of the significant finding with gender and active engagement, a second scatterplot based on gender (e.g., female and male respondents coded with different symbols) was plotted and examined. Women and men respondents were both represented in the three categories of Exemplary, Pragmatist and Conformist followers (see Figure 2).

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Insert Figure 2 about here.

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## Limitations, Suggestions for Further Research, and Discussion

### Limitations

This exploratory study examined the understanding that high school principals have about their role as followers in a school district. The study is limited by the number of respondents in this case, approximately 15% of the high school principals in the state of Ohio. The study is also limited to high school principals, rather than all building level administrators. Additionally, while the researchers indicated logical and possible interpretations of the data, there may be other plausible explanations for the findings which are as yet undiscovered.

### Suggestions for Further Research

Further research should include other levels of administrators, a larger sample, and a qualitative understanding of principal beliefs about followership.

### Discussion

The gender difference in this study is significant in that it indicates that women recognize the importance of active engagement in the role of follower within the school district organization more than men do. Women have proven themselves to be effective school administrators; the research is overwhelming in pointing to ratings of women as equal to or better than men in various administrative positions (Frasher and Frasher; 1979; Shakeshaft, 1989; Perrault and Irwin, 1996). Yet women remain a small percentage of high school principals, a position that is seen as difficult for women (Shakeshaft, 1989). The small number of women respondents in this sample is typical. However, this research supports previous research which suggests that women are effective administrators. In fact, women administrator's ways of working are strikingly similar to descriptions of effective school leadership (Shakeshaft, 1989). They display active engagement and independent thinking in their roles as middle managers in school districts. In this study, women recognized the importance of active engagement within the school organization and reported higher levels of initiative, independent work, and commitment to their work than the male principals in the study. Women also reported more collaborative, enthusiastic, and highly energized behaviors as important to their success. Both men and women scored high levels of independent thinking. The results suggest that women should continue to be actively recruited for principal positions in school districts, for they exhibit characteristics of true followership.



## References

- Blumberg, A. & Greenfield, W. (1986). **The effective principal: Perspectives on school leadership**. Boston, MA: Allyn and Bacon.
- Burns, J. M. (1978). **Leadership**. New York: Harper and Row.
- Chaleff, I. (1995). **The courageous follower: Standing up to and for our leaders**. San Francisco: Berrett-Koehler.
- Covey, S. R. (1993). **Principle-centered leadership**. New York: Simon and Schuster.
- Crocker, L. M. & Algina, J. (1986). **Introduction to classical and modern test theory**. New York : Holt, Rinehart, and Winston.
- Deal, T. E., & Peterson, K. D. (1990). **The principal's role in shaping school culture**. Washington, D.C.: U. S. Department of Education.
- Drake, T. L & Roe, W. H. (1986). **The principalship**. New York, NY: Macmillan.
- Frasher, J.M. & Frasher, R.S. (1979). Educational administration: A feminine profession. **Educational Administration Quarterly**, 15, (2), 1-13.
- French, J. R. P., & Raven, B. (1960). The bases of social power. In D. Cartwright & A. Zander (Eds.), **Group dynamics: Research and theory** (2nd ed.). Evanston, IL: Harper and Row.
- Graham, P. (1995). **Mary Parker Follett: Prophet of Management**. Boston, MA: Harvard Business School Press.
- Hart, A. W. & Bredeson, P. V. (1995). **The principalship: A theory of professional learning and practice**. New York, NY: McGraw-Hill, Inc.
- Heifetz, R. A. (1994). **Leadership without easy answers**. Cambridge, MA: Harvard University Press.

Hollander, E. P., & Offermann, L. R. (1990). Relational features of organizational leadership and followership. In Clark, K. E. & Clark, M. B. (Eds.), **Measures of leadership**. West Orange, NJ: Leadership Library of America, Inc.

Kelley, R. E. (1988). In praise of followers. **Harvard Business Review**, 66(6), 142-148.

Kelley, R. E. (1991). Combining followership and leadership into partnership. In R. H. Kilmann and I. Kilmann & Associates (Eds.), **Making organizations competitive** (pp. 195-220). San Francisco: Jossey-Bass.

Kelley, R. E. (1992). **The power of followership**. New York: Doubleday.

Kouzes, J. M. & Posner, B. Z. (1995). **The leadership challenge: How to keep getting extraordinary things done in organizations**. San Francisco: Jossey-Bass.

Lee, C. (1991). Followership: The essence of leadership. **Training**, 27-35.

Leithwood, K. A. (1994). Leadership for school restructuring. **Educational Administration Quarterly**, 30 (4), 498-518.

Lipham, J. M., Rankin, R. E. & Hoeh, J. A. Jr. (1985). **The principalship: Concepts, competencies, and cases**. New York, NY: Longman.

Lundin, S. C., & Lancaster, L. C. (1990, May/June). Beyond leadership: The importance of followership. **The Futurist**, 18-22.

Ogawa, R. T., & Bossert, S. T. (1995). Leadership as an organizational quality. **Educational Administration Quarterly**, 31(2), 224-243.

Owens, R. C. (1995). **Organizational behavior in education**. Boston, MA: Allyn and Bacon.

Perrault, M.R. & Irwin, J.K. (1996). **Gender differences at work: Are men and women really that different?** Agoura Hills, CA: Advanced Teamware, Inc. (<http://www.ateamware.com>.)

Petersen, G. J. (1993). Keeper and seller of the vision: Superintendents as instructional leaders. **Outcomes**, 12, (4). 16- 29.

Senge, (1990). **The fifth discipline**. New York: Doubleday.

Sergiovanni, T. J. (1992). **Moral leadership: Getting to the heart of school improvement**. San Francisco: Jossey-Bass.

Shakeshaft, C. (1989) **Women in educational administration**. Newbury Park, CA: Corwin Press, Inc.

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Table 1:

Demographics of Survey Respondents\***Gender:**

16	68
(female)	(male)

**Age:**

1	12	15	30	13	11	2
(30 –35)	(36–40)	(41– 45)	(46 – 50)	(51– 55)	(55– 60)	(61–65)

**Educational Level:<sup>1</sup>**

71	4	7
(master's)	(specialist)	(doctorate)

**Administrative Level:**

81	3
(h.s. principal)	(district–level)

**School Location:**

33	36	15
(rural)	(suburban)	(urban)

**Years as an Administrator:**

18	17	16	19	10	4
(1 to 5)	(6 to 10)	(11 to 15)	(16 to 20)	(21 to 25)	(26+ )

**Years in Current Administrative Position:<sup>2</sup>**

54	19	7	3	2
(1 to 5)	(6 to 10)	(11 to 15)	(16 to 20)	(21 to 25)

**Total Years Experience in Education:<sup>3</sup>**

1	22	45	15
(1 to 10)	(11 to 20)	(21 to 30)	(31 to 40)

\* Note: Numbers in this table are based on frequency counts for each category. (N=84)

1. Two individuals failed to respond to the question regarding educational level

2. Two individuals failed to respond to the question regarding years in current admin. position

3. One individual failed to respond to the question regarding total years of experience in education.

Table 2:

Independent Thinking and Active Engagement Subscale Means and Standard Deviations

<b>Subscale</b>	<i>M</i>	<i>SD</i>	<i>n</i>
Independent Thinking	34.58	5.65	76
Active Engagement	42.68	3.81	80

Figure 1:  
**Scatterplot of INDEPENDENT THINKING**

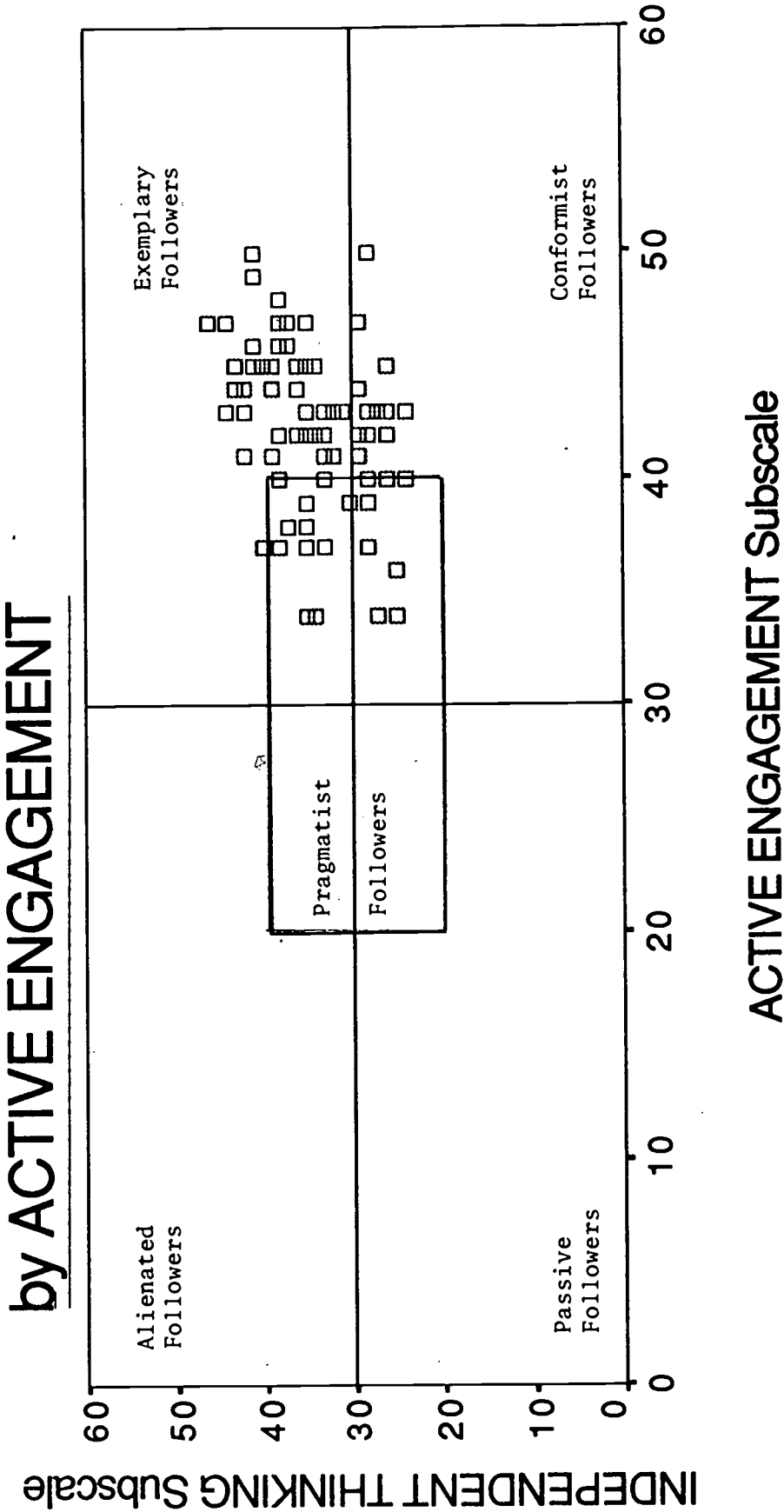


Table 3:

One-way Analysis of Variance Regarding the Independent Thinking Subscale

Variable	Source	df	MS	F	F
				Ratio	Prob.
Years in Current Position	between	4	60.14	1.98	.106
	within	71	30. 33		
Years as an Administrator	between	5	35.08	1.10	.364
	within	70	31. 70		
School Location	between	2	9.870	.303	.739
	within	73	32.53		
Gender	between	1	67.16	2.13	.148
	within	74	31.45		
Highest Academic Degree	between	2	10.41	.316	.729
	within	71	32. 88		
Age	between	6	29.91	.931	.478
	within	69	32.10		
Total Years In Education	between	3	9.683	.297	.826
	within	70	32. 52		

Note: \*  $p < .05$ .

Table 4:

One-way Analysis of Variance Regarding the Active Engagement Subscale

Variable	Source	df	MS	F Ratio	F Prob.
Years in Current Position	between	4	2.208	.145	.964
	within	75	15.20		
Years as an Administrator	between	5	14.68	1.00	.418
	within	74	14.54		
School Location	between	2	28.56	2.01	.140
	within	77	14.18		
Gender	between	1	80.80	5.89	.017*
	within	78	13.70		
Highest Academic Degree	between	2	3.673	.245	.782
	within	75	14.94		
Age	between	6	17.20	1.200	.315
	within	73	14.33		
Total Years In Education	between	3	13.37	.898	.446
	within	74	14.89		

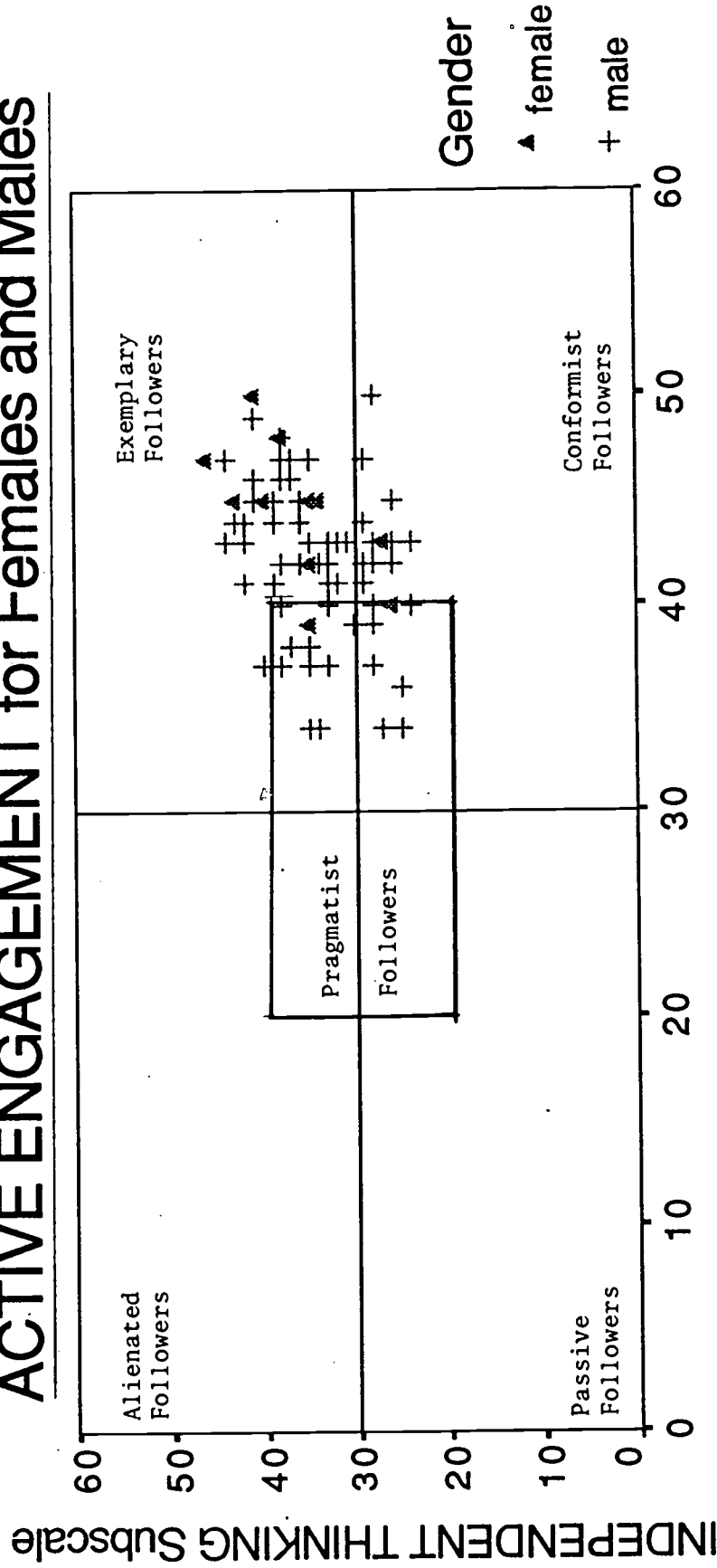
Note: \*  $p < .05$ .



Figure 2:

# Scatterplot of INDEPENDENT THINKING by

## ACTIVE ENGAGEMENT for Females and Males



ACTIVE ENGAGEMENT Subscale



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Author(s): GEORGE J. PETERSEN AND CYNTHIA X. BEEKLEY

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